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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DENNIS THOMAS GILHAM

Appeal 2009-000691
Application 09/934,841
Technology Center 3600

Decided: December 3, 2009

Before HUBERT C. LORIN, ANTON W. FETTING, and BIBHU R. MOHANTY, *Administrative Patent Judges.*

FETTING, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

Dennis Thomas Gilham (Appellant) seeks review under 35 U.S.C. § 134 (2002) of a final rejection of claims 11-13, the only claims pending in the application on appeal.

We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b) (2002).

SUMMARY OF DECISION1

We REVERSE.

THE INVENTION

The Appellant invented a way for the provision of security and authentication of postage indicia printed on mail items (Specification 1:3-5).

An understanding of the invention can be derived from a reading of exemplary claim 11, which is reproduced below [bracketed matter and some paragraphing added].

> 11. A method of printing postal indicia on a plurality of mail items, said postal indicia including postage data and an authentication code, including the steps of:
>
> [1] storing a secret key;

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1 Our decision will make reference to the Appellant's Appeal Brief ("App. Br.," filed November 26, 2007) and Reply Brief ("Reply Br.," filed February 29, 2008), and the Examiner's Answer ("Ans.," mailed February 26, 2008).

[2] determining a period of time in which postal indicia are to be printed on a plurality of mail items;

[3] storing a postage value relating to postage charges dispensed in said period of time;

[4] providing postage data including said postage value;

[5] generating a modified key relating specifically to a mail item by utilizing said secret key and said postage data;

[6] generating an authentication code by utilizing said modified key and said postage data; and

[7] printing said postage data and said authentication code as a postal indicium on said mail item.

THE REJECTION

The Examiner relies upon the following prior art:

Kara	US 6,249,777 B1	Jun. 19, 2001
Windel	US 5,671,146	Sep. 23, 1997

Claims 11-13 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Kara and Windel.

ARGUMENTS

The Appellant argues these claims as a group.

Accordingly, we select claim 11 as representative of the group. 37 C.F.R. § 41.37(c)(1)(vii) (2008).

The Examiner found that Kara described all the limitations except for modifying the key, but that Windel described that. The Appellant contends that Windel fails to describe the generation of a modified key for each mail item or the utilization of that modified key for the purpose of generating an

authentication code as required. The Appellant further argues that Windel fails to describe the generation of a modified key which is based in part on postage value relating to postage charges dispensed in a determined period of time in which postal indicia are to be printed on a plurality of mail items. The Appellant contends that the fact that key modification per se is known from the prior art does not render all inventions relating to key modification obvious.

ISSUES

The issue of whether the Appellant has sustained its burden of showing that the Examiner erred in rejecting claims 11-13 under 35 U.S.C. § 103(a) as unpatentable over Kara and Windel turns on whether one of ordinary skill would have found it predictable to use a modified key in a postage authentication code.

FACTS PERTINENT TO THE ISSUES

The following enumerated Findings of Fact (FF) are believed to be supported by a preponderance of the evidence.

Facts Related to the Prior Art

Kara

01. Kara is directed to the metering of the postage accomplished at a remote location allowing access to multiple systems demanding postage.

02. The use of encrypted data provides the ability to identify rogue use of postage indicia. A demand program makes a demand for

postage to a remote postage meter. The remote postage meter verifies postage demands and electronically transmits the desired postage indicia to the first PC in the form of a data packet. For security purposes, the data packet may be encrypted. Subsequently, the Demand program receives the data packet and prints postage indicia, designating the appropriate amount of postage.

03. The postage indicia may contain encrypted information, such as transaction identification, the sender's and/or recipient's address or the Meter and/or Demand program serial number.

04. The Demand program may determine a correct amount of postage from the context of the correspondence, such as size or weight of paper, draft or correspondence mode and may independently print a destination address and return address in addition to the postage indicia to be printed on an item of mail.

05. The Demand program can transmit a variety of information to be encoded by the Meter program within the postage indicia using symbol technology. Such information is machine readable and can be used to identify postage indicia forgeries. The Demand or Meter programs may also encode a variety of information into a bar code that may be printed separately from the postage indicia. For example, the Demand program could automatically produce a "partial" indicia, such as zip+4 to be printed on the postal item. The remote Meter program will then, by knowing what the Demand program has produced or will produce, generate the

remainder of the indicia to match this partial indicia. Thus, any attempt to intercept the indicia transmitted from the Meter program will result in a partial or mismatched indicia printed by the interceptor.

Windel

06. Windel is directed to a postage machine security system which permits a distinction to be made between authorized opening (service inspection) and unauthorized opening (manipulative purpose) of the postage machine. Windel 6:44-49.

07. A transaction request leads to a specifically protected reloading of credit in the postage meter machine with a time control during the reloading of credit. If the postage meter machine is observed to have an emulator/debugger, then it is probable that the communication and accounting routines will not sequence within a predetermined time. A part of the DES key is modified when this is the case, i.e. when the routines require substantially more time. The data center can identify this modified key during a communication routine and can subsequently report the postage meter machine as being suspect to induce the delay. Windel 18:61 -19:7.

Facts Related To The Level Of Skill In The Art

08. Neither the Examiner nor the Appellants has addressed the level of ordinary skill in the pertinent arts of systems analysis and programming, postage generation systems or cryptographic security systems. We will therefore consider the cited prior art as

representative of the level of ordinary skill in the art. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) ("[T]he absence of specific findings on the level of skill in the art does not give rise to reversible error 'where the prior art itself reflects an appropriate level and a need for testimony is not shown'") (quoting *Litton Indus. Prods., Inc. v. Solid State Sys. Corp.*, 755 F.2d 158, 163 (Fed. Cir. 1985).

Facts Related To Secondary Considerations

09. There is no evidence on record of secondary considerations of non-obviousness for our consideration.

PRINCIPLES OF LAW

Obviousness

A claimed invention is unpatentable if the differences between it and the prior art are "such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007); *Graham v. John Deere Co.*, 383 U.S. 1, 13-14 (1966).

In *Graham*, the Court held that that the obviousness analysis is bottomed on several basic factual inquiries: "[(1)] the scope and content of the prior art are to be determined; [(2)] differences between the prior art and the claims at issue are to be ascertained; and [(3)] the level of ordinary skill in the pertinent art resolved." *Graham,* 383 U.S. at 17. *See also KSR*, 550 U.S. at 406. "The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *Id.* at 416.

ANALYSIS

The Appellant has not argued limitations [1]-[4] of claim 11. The only issue under contention is, whether one of ordinary skill would have generated a modified key relating specifically, to a mail item using a secret key and generated an authentication code with the modified key and printed the authentication code on a mail item as in limitations [5]-[7]. The Examiner found that Windel described such a use for a modified key. Ans. 4. The Examiner also found that the use of modified keys was "well known" and cited several other references as support and that the claim only united old elements with no change in their function. Ans. 6.

We must agree with the Appellant. The fundamental issue here is whether Windel would have informed one of ordinary skill as to why the modified key would have been used with Kara, since Kara is silent as to the subject. As the Appellant argues, Windel uses a modified key for a completely different purpose than would be apparent for use in the claim. App. Br. 4.

Windel uses a modified key to intentionally induce a time delay for reloading credit in a postage machine when it is apparent the reload process will need the extra time. FF 07. The Examiner found that the claim was simply the combination of elements for their respective functions. The Examiner has not made any findings as to how the function of inducing a delay in processing by using a modified key would be applicable to using the key in the postal indicia of Kara, and it is not apparent how one of ordinary skill would have looked to induce such a delay. Instead, the Examiner made a conclusory observation that it would have been obvious to apply Kara's

modified key to Windel to improve security and fraud prevention. Ans. 4. The Examiner made no findings as to how such a combination would have in fact improved security and fraud prevention, particularly since Windel's key was not public.

> [R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.

KSR, 550 U.S. at 417-418, quoting *In re Kahn*, 441 F.3d 977, 988 (C.A. Fed. 2006).

Thus, the Examiner appears to be relying on impermissible hindsight to combine the references, as there is no objective evidence for doing so. Apparently the Examiner understood the weakness in this rejection and cited several additional patents using modified keys. Ans. 6. The Examiner did not make any specific findings of fact regarding how these patents pertained to the claim at issue and did not provide any citations to where descriptions pertinent to the claim were to be found. None of the patents cited were included in the rejection and so the patents appear to be proffered as evidence of the notoriety of modified keys. We are unable to find any reference to a modified key in the patents proffered by the Examiner that would support the Examiner's finding that one of ordinary skill would have used such a key with Kara to form the claimed invention.

CONCLUSIONS OF LAW

The Appellant has sustained its burden of showing that the Examiner erred in rejecting claims 11-13 under 35 U.S.C. § 103(a) as unpatentable over Kara and Windel.

DECISION

To summarize, our decision is as follows.

- The rejection of claims 11-13 under 35 U.S.C. § 103(a) as unpatentable over Kara and Windel is not sustained.

REVERSED

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